# 10 | FINANCIAL ANALYSIS

#### INTRODUCTION

This Chapter of the City of Kent's (City) 2019 Water System Plan (WSP) puts forth a strategy for implementing the capital and non-capital recommendations identified throughout the WSP. A financial analysis is presented to evaluate the ability of the City to financially support the necessary improvements to the water system identified in the Capital Improvements Plan put forth in **Chapter 9**. A 10-year proposed budget is provided that identifies the overall revenue requirements compared to anticipated income. This section is not intended to be a rate analysis, but is provided as a cursory review of revenue requirements and identification of potential funding sources.

#### FISCAL RESPONSIBILITY

Provision of public water service is essential to the preservation of public health, safety, and protection of the environment. Because water and other utility systems must maintain a high level of integrity, they require a much greater capital investment to operate and maintain than most other public services. Most water utility costs are fixed, due to the nature of funding large capital improvements, and the relatively stable costs of operating labor, insurance, and other expenses that do not vary with water use. Fixed costs, which are incurred regardless of customer consumption, are associated with making the service available at the point of customer use. A smaller proportion of a utility systems cost is variable and changes with the volume of water consumed and/or used (i.e. the cost of purchased water, power for pumping, etc.). The City strives to maintain reasonable water rates while maintaining the integrity of the water system and the service provided by the Water Department. The water utility is operated out of a separate utility fund, adding to the viability of the utility and ability to set water rates dedicated to the maintenance and upgrade of the water system as required to meet the public health and safety needs of current and projected system customers.

## **FUNDING SOURCES**

Funding sources available to the City for capital projects consist primarily of debt mechanisms or cash funding through various rates and fees. Historically, federal and state grant programs were available for financial assistance; however, these have been mostly eliminated or replaced by loan programs. Remaining miscellaneous grant programs are generally lightly funded and heavily subscribed. Although competitive, the benefits of low-interest loan programs in the State of Washington include relatively low administrative costs and the ability to spread costs over a period of time to reduce sudden rate impacts.

Income from water sales is the primary source of revenue and is utilized to finance Water Department expenses that are not otherwise funded by developer extensions, assessments, system development charges (SDCs), or miscellaneous fees. Typical expenses financed from water sales include: operation and maintenance; water supply and quality analysis; administrative,

accounting and collection expenses; debt service requirements; system renewal and replacement; and other general operating expenses.

The City's rate schedule as of January 1, 2019 is listed in **Table 10-1**. Water rates are subject to periodic changes, and current rates are available on the City's website at <a href="http://www.kentwa.gov">http://www.kentwa.gov</a>. Rates include a block rate structure and rebates for low-flow water fixtures as incentive to encourage water conservation and provide customers options for reducing their water bills with certain lifestyle changes. The City's rate structure is designed to encourage conservation, which reduces consumption and sales related to consumption. It is imperative that water sales and revenues are closely monitored to ensure water rates and revenues are sufficient. Revenues and expenses are monitored throughout the year to ensure operations are occurring as anticipated in the City's approved budget. Bi-annual budgets are prepared to estimate revenues and expenditures for the following years. Water rates are periodically reviewed to determine the adequacy of projected revenues to cover anticipated expenditures. It is important to review rates and system connection charges at the completion of water system plan updates, when updated population, employment, and demand projections are developed to confirm project needs during the 10-year planning horizon and beyond.

Table 10-1
Water System 2019 Rates

Water Utility Meter Access Fees			Water Usage Fees per 100 cubic feet (748 gallons)				
Meter Size		Monthly					
(inches)		Fee	0-800 cf	\$	2.52		
Residential			800+ cf	\$	4.96		
<1	\$	24.28					
1	\$	38.01					
			Water Tap Fees (new connections)				
<u>Commerical</u>			Size				
<1	\$	30.52	<3/4	\$	100.00		
1	\$	44.25	3/4	\$	125.00		
1.5	\$	78.59	1	\$	175.00		
2	\$	119.80	1.5	\$	360.00		
3	\$	188.48	2	\$	500.00		
4	\$	284.63	>2		See KCC		
6	\$	422.00		7	7.02.160 [C]		
8	\$	559.36					
10	\$	696.73	System De	evelopment	Fees		
Dedicated Fireline			<1	\$	7,694.19		
<1	\$	2.89	1	\$	19,234.84		
1	\$	3.37	1.5	\$	38,468.40		
1.25	\$	5.05	2	\$	61,549.70		
1.5	\$	6.73	3	\$	123,100.70		
2	\$	10.77	4	\$	192,344.60		
3	\$	26.92	5	\$	288,331.30		
4	\$	53.82	6	\$	384,689.20		
6	\$	107.65	8	\$	615,502.19		
8	\$	181.67	10	\$	846,315.22		
10	\$	269.14	10	Ψ	3 10,0 10.22		
10	Ψ	200.14					
Backflow Fee	\$	106.71					

To establish an affordable and sustainable rate structure, the City compiled a list of current rate structures at comparable neighboring water districts. Prior to the rate study, the City was on the low to mid-range of its comparable districts. The rate increase adopted in November 2016 allowed the City to remain in the mid-range for residential and commercial rates. At this point, the City does not anticipate the need to take on additional debt for funding the capital program over the term of this WSP, as it is a balanced plan. If, during this time, circumstances change that require financing through debt or other sources beyond cash financing, there are multiple options that could be considered depending on the need. These options include:

- State-funded programs: Public Works Trust Fund Loans; and
- Bonds: Assessment Bonds; General Obligation (G.O.) Bonds; Councilmanic G.O. Bonds; and Revenue Bonds.

### FINANCING PLAN AND PAST PERFORMANCE

In 2016, the City completed a water rate study and subsequently adopted a new structure for water rates that addressed the operating and capital needs for the system. The new rates included adopting a fee for dedicated fire lines; adding an automatic annual cost of living increase for fees associated with use, meters, and fire lines; increasing the meter fee based on size and flow; and eliminating the winter and summer rates to have one year-round rate. Additionally, the adopted rate structure started to address the imbalance of fixed and variable revenue to fixed and variable expenses by increasing meter fees, implementing the fire line fee, and reducing the use fee on the first tier. This imbalance was partially a consequence of a highly successful water efficiency and conservation effort that discouraged high water use and, therefore, sales related to that use. The implemented changes have been in place since January1, 2017, and have proven to be a sustainable rate structure to fund the operating and capital needs of the system. The current rate structure has been set to handle emergency situations. In the event of large or small emergencies, funds can be diverted from capital projects, or the capital fund balance can be used to cover expenses. In December 2017, City Council adopted a fund balance reserve policy that requires a 20 percent of operating expenses fund balance that would be available for use in case of an emergency.

The estimated costs of proposed capital improvement projects recommended, as well as anticipated revenue and operating expenses for the 10-year planning horizon, are detailed in **Table 10-2**. It is anticipated that projects identified in this WSP will be financed from cash on hand. It is important to note that the anticipated revenue and expenses beyond the council adopted budget for 2019-2020 are estimates based on minimal growth that include a cost of living increase for the water revenues and expenses over the term of this WSP. A historical look at revenues and expenses also is provided in **Table 10-3**. The combination of the historical data, in conjunction with the financial plan for future revenues and expenditures, demonstrate the financial viability of the City of Kent's Water Utility.

The funding for capital improvements in this WSP is balanced. However, the City recognizes that the economy and other factors can change the needs of the water system. The City periodically contracts or performs rate studies to analyze changes in circumstance. The last rate study was completed and adopted in 2016, and the City anticipates beginning another rate study in 2020 to be completed in 2022.

CITY OF KENT WATER SYSTEM PLAN FINANCIAL ANALYSIS

Table 10-2
Water Operating Fund Projections

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Preliminary Budget	Budget	Projection								
Revenues											
Charges for Services	22,519,154	23,363,100	23,923,790	24,497,961	25,085,912	25,687,974	26,304,485	26,935,793	27,582,252	28,244,226	28,922,087
System Dev/Connection Charges	1,852,189	1,451,100	1,480,120	1,515,643	1,552,018	1,589,267	1,627,409	1,666,467	1,706,462	1,747,417	1,789,355
Miscellaneous Revenue	1,178,818	661,350	674,580	690,770	707,348	724,325	741,709	759,510	777,738	796,403	815,517
Transfers In	-	-	-	-	-	-	-	-	-	-	-
Operating Revenues	25,550,161	25,475,550	26,078,490	26,704,374	27,345,279	28,001,565	28,673,603	29,361,769	30,066,452	30,788,047	31,526,960
Transfers In-Debt Service	3,760,718	4,113,510	3,579,390	4,604,978	4,061,511	3,515,473	4,146,464	4,130,653	4,109,197	4,093,757	4,076,208
Total Revenues	29,310,879	29,589,060	29,657,880	31,309,352	31,406,790	31,517,039	32,820,067	33,492,422	34,175,649	34,881,804	35,603,168
Expenditures											
Salaries & Benefits	3,152,687	3,500,220	3,614,120	3,722,544	3,834,220	3,949,247	4,067,724	4,189,756	4,315,448	4,444,912	4,578,259
Supplies	537,557	815,650	830,030	846,631	863,563	880,834	898,451	916,420	934,749	953,444	972,512
Services & Charges	9,281,302	10,874,800	11,224,460	11,448,949	11,677,928	11,911,487	12,149,716	12,392,711	12,640,565	12,893,376	13,151,244
Vehicles & Equipment	-	120,000	-	-	-	-	-	-	-	-	-
Cost Allocation	(371,148)	(480,000)	(480,000)	(494,400)	(509,232)	(524,509)	(540,244)	(556,452)	(573,145)	(590,339)	(608,050)
Transfers to Debt Service	46,983	-	-	-	-	-	-	-	-	-	-
Transfers to Capital Projects	7,760,420	13,119,000	5,627,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Debt Service - Principal	2,044,028	2,304,030	2,264,020	2,951,528	2,509,750	2,065,000	2,800,000	2,925,000	3,052,500	3,192,500	3,337,500
Debt Service - Interest	1,719,948	1,809,480	1,315,370	1,653,450	1,552,761	1,450,473	1,346,464	1,205,653	1,056,697	901,257	738,708
Operating Expenditures	24,171,777	32,063,180	24,395,000	26,128,701	25,928,990	25,732,532	26,722,111	27,073,088	27,426,814	27,795,150	28,170,174
Transfers Out - Debt Service	3,760,718	4,160,320	3,579,390	4,604,978	4,061,511	3,515,473	4,146,464	4,130,653	4,109,197	4,093,757	4,076,208
Total Expenditures	27,932,495	36,223,500	27,974,390	30,733,680	29,990,501	29,248,005	30,868,576	31,203,740	31,536,012	31,888,907	32,246,381
Change in Fund Balance	1,378,384	(6,634,440)	1,683,490	575,672	1,416,289	2,269,034	1,951,492	2,288,682	2,639,638	2,992,897	3,356,786
Ending Fund Balance	14,466,575	7,832,135	9,515,625	10,091,297	11,507,586	13,776,619	15,728,111	18,016,793	20,656,430	23,649,328	27,006,114

Table 10-3
Water Operating Fund History

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2012	2013	2014	2015	2016	2017	
Actuals	Actuals	Preliminary	Actuals	Actuals	Actuals	
16,249,512	17,007,080	18,411,975	18,901,932	18,751,378	21,810,968	
1,266,547	1,370,342	1,338,469	890,927	1,495,241	1,986,572	
713,106	1,101,250	1,339,026	498,209	846,052	976,012	
-	5,854	10,026	-	4,838	500	
18,229,165	19,484,526	21,099,496	20,291,068	21,097,509	24,774,052	
3,480,575	4,397,692	3,668,805	3,676,293	3,428,491	3,435,184	
21,709,740	23,882,218	24,768,301	23,967,361	24,526,000	28,209,236	
3,105,497	2,839,228	2,780,926	2,863,591	3,016,383	2,956,384	
541,390	585,486	530,365	575,318	745,453	621,832	
7,035,164	8,026,927	7,822,797	8,051,658	8,345,677	8,919,899	
-	_	-	144,766	-	17,661	
(737,533)	(879,343)	(456,770)	(505,647)	(480,711)	(506,142)	
46,969	48,936	47,064	47,100	46,894	47,360	
3,151,301	2,704,254	3,025,900	2,800,000	3,009,738	7,450,000	
1,667,974	2,782,326	2,016,528	2,071,528	1,971,528	2,024,028	
1,812,601	1,615,366	1,652,277	1,612,939	1,571,379	1,611,727	
16,623,363	17,723,180	17,419,087	17,661,253	18,226,341	23,142,749	
3,480,575	4,397,692	3,668,805	3,676,293	3,428,491	3,435,184	
20,103,938	22,120,872	21,087,892	21,337,546	21,654,832	26,577,933	
1 605 802	1 761 3 <i>4</i> 6	3 680 <u>4</u> 09	2 629 815	2 871 168	1,631,303	
					13,088,191	
	16,249,512 1,266,547 713,106 - 18,229,165 3,480,575 21,709,740  3,105,497 541,390 7,035,164 - (737,533) 46,969 3,151,301 1,667,974 1,812,601 16,623,363 3,480,575	Actuals         Actuals           16,249,512         17,007,080           1,266,547         1,370,342           713,106         1,101,250           -         5,854           18,229,165         19,484,526           3,480,575         4,397,692           21,709,740         23,882,218           3,105,497         2,839,228           541,390         585,486           7,035,164         8,026,927           -         -           (737,533)         (879,343)           46,969         48,936           3,151,301         2,704,254           1,667,974         2,782,326           1,812,601         1,615,366           16,623,363         17,723,180           3,480,575         4,397,692           20,103,938         22,120,872           1,605,802         1,761,346	Actuals         Actuals         Preliminary           16,249,512         17,007,080         18,411,975           1,266,547         1,370,342         1,338,469           713,106         1,101,250         1,339,026           -         5,854         10,026           18,229,165         19,484,526         21,099,496           3,480,575         4,397,692         3,668,805           21,709,740         23,882,218         24,768,301           3,105,497         2,839,228         2,780,926           541,390         585,486         530,365           7,035,164         8,026,927         7,822,797           -         -         -           (737,533)         (879,343)         (456,770)           46,969         48,936         47,064           3,151,301         2,704,254         3,025,900           1,667,974         2,782,326         2,016,528           1,812,601         1,615,366         1,652,277           16,623,363         17,723,180         17,419,087           3,480,575         4,397,692         3,668,805           20,103,938         22,120,872         21,087,892           1,605,802         1,761,346         3,680,409 <td>Actuals         Preliminary         Actuals           16,249,512         17,007,080         18,411,975         18,901,932           1,266,547         1,370,342         1,338,469         890,927           713,106         1,101,250         1,339,026         498,209           -         5,854         10,026         -           18,229,165         19,484,526         21,099,496         20,291,068           3,480,575         4,397,692         3,668,805         3,676,293           21,709,740         23,882,218         24,768,301         23,967,361           3,105,497         2,839,228         2,780,926         2,863,591           541,390         585,486         530,365         575,318           7,035,164         8,026,927         7,822,797         8,051,658           -         -         -         144,766           (737,533)         (879,343)         (456,770)         (505,647)           46,969         48,936         47,064         47,100           3,151,301         2,704,254         3,025,900         2,800,000           1,667,974         2,782,326         2,016,528         2,071,528           1,812,601         1,615,366         1,652,277         1,</td> <td>Actuals         Preliminary         Actuals         Actuals           16,249,512         17,007,080         18,411,975         18,901,932         18,751,378           1,266,547         1,370,342         1,338,469         890,927         1,495,241           713,106         1,101,250         1,339,026         498,209         846,052           -         5,854         10,026         -         4,838           18,229,165         19,484,526         21,099,496         20,291,068         21,097,509           3,480,575         4,397,692         3,668,805         3,676,293         3,428,491           21,709,740         23,882,218         24,768,301         23,967,361         24,526,000           3,105,497         2,839,228         2,780,926         2,863,591         3,016,383           541,390         585,486         530,365         575,318         745,453           7,035,164         8,026,927         7,822,797         8,051,658         8,345,677           -         -         -         144,766         -           (737,533)         (879,343)         (456,770)         (505,647)         (480,711)           46,969         48,936         47,064         47,100         46,894     </td>	Actuals         Preliminary         Actuals           16,249,512         17,007,080         18,411,975         18,901,932           1,266,547         1,370,342         1,338,469         890,927           713,106         1,101,250         1,339,026         498,209           -         5,854         10,026         -           18,229,165         19,484,526         21,099,496         20,291,068           3,480,575         4,397,692         3,668,805         3,676,293           21,709,740         23,882,218         24,768,301         23,967,361           3,105,497         2,839,228         2,780,926         2,863,591           541,390         585,486         530,365         575,318           7,035,164         8,026,927         7,822,797         8,051,658           -         -         -         144,766           (737,533)         (879,343)         (456,770)         (505,647)           46,969         48,936         47,064         47,100           3,151,301         2,704,254         3,025,900         2,800,000           1,667,974         2,782,326         2,016,528         2,071,528           1,812,601         1,615,366         1,652,277         1,	Actuals         Preliminary         Actuals         Actuals           16,249,512         17,007,080         18,411,975         18,901,932         18,751,378           1,266,547         1,370,342         1,338,469         890,927         1,495,241           713,106         1,101,250         1,339,026         498,209         846,052           -         5,854         10,026         -         4,838           18,229,165         19,484,526         21,099,496         20,291,068         21,097,509           3,480,575         4,397,692         3,668,805         3,676,293         3,428,491           21,709,740         23,882,218         24,768,301         23,967,361         24,526,000           3,105,497         2,839,228         2,780,926         2,863,591         3,016,383           541,390         585,486         530,365         575,318         745,453           7,035,164         8,026,927         7,822,797         8,051,658         8,345,677           -         -         -         144,766         -           (737,533)         (879,343)         (456,770)         (505,647)         (480,711)           46,969         48,936         47,064         47,100         46,894	

Historical information was gathered from budget documents located on the City website

2014 are preliminary numbers actuals not printed in budget book.